

Serial No.: 10/783,823

REMARKS

Claims 1-7 are pending in the present application after this amendment cancels claims 8 and 9. Claim 1 is amended to include features of claims 8 and 9, and therefore the amendments do not add new matter and are supported throughout the specification and figures. In particular, the amendments are supported in the specification at page 5, line 23 to page 6, line 2, and in figure 2. Applicants respectfully request that the amendments be entered since they do not raise new issues and/or place the claims in condition for allowance. Additionally, Applicants request that the finality of the rejection be withdrawn since the Examiner has not examined new claims 8 and 9, which were submitted in the Amendment filed on June 12, 2006. Since these claims were submitted in response to a non-final Office Action, these claims should have been admitted and examined. Therefore, Applicants respectfully request that the finality of the Office Action be withdrawn so that the features of the new claims, now presented in amended claim 1, may be examined. In view of the amendments and the following remarks, favorable reconsideration of this case is respectfully requested.

Additionally, the Examiner does not appear to reject claim 7 with specificity. Applicants respectfully request clarification of the status of claim 7 in the next Office communication.

Claims 1-3 are rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 4,627,533 to Pollard (hereinafter Pollard). Applicants respectfully traverse.

Claim 1 relates to a temperature-compensated crystal oscillator that includes, *inter alia*, a substrate having a circuit pattern disposed on a surface thereof and mounting electrodes disposed on a reverse side thereof and electrically connected to the circuit pattern, and circuit components mounted on the surface of the substrate and electrically connected to the circuit pattern. Claim 1 also recites *a surface-mount crystal unit having a crystal unit*, mounted on the surface of the

Serial No.: 10/783,823

substrate and electrically connected to the circuit pattern. In amended claim 1, *the crystal unit is hermetically sealed in a casing independent of said substrate*. In the temperature-compensated crystal oscillator of claim 1, the crystal unit has *a cavity defined in a mounting surface thereof*. At least one of *the circuit components is housed in the cavity* and at least one of the remaining circuit components is disposed outside of the cavity. In amended claim 1, *the casing of the hermetically sealed crystal unit is not directly mounted on the substrate*.

The Examiner maintains that Pollard discloses a surface-mount crystal unit having a hermetically sealed crystal unit, the crystal unit having a cavity defined in a mounting surface thereof, and at least one of the circuit components is housed in the cavity. The Examiner maintains that the structure disclosed in figures 2 and 3 of Pollard discloses these features. However, the Examiner's position is inconsistent with regard to element 72 of Pollard, which the Examiner asserts discloses both a surface mount crystal unit *and* a circuit component within the sealed cavity. Therefore, for at least this reason claim 1 is allowable.

Additionally, in the interest of expediting prosecution, Applicants herein amend claim 1 to include features of claims 8 and 9. In particular, claim 1 has been amended to include the feature that the casing of the hermetically sealed crystal unit is sealed in a casing independent of the substrate, and that the hermetically sealed crystal unit is not directly mounted on the substrate. Pollard does not disclose or suggest the feature of an arrangement in which a cavity for receiving circuit components is formed between a substrate and a casing for hermetically sealing a crystal blank. According to the present invention, the cavity for accommodating at least one circuit component is defined in a mounting surface of the crystal unit. Therefore, in amended claim 1, a casing is formed in the mounting surface of the crystal oscillator, which accommodates a crystal blank and hermetically seals the unit independent of the substrate. The

Serial No.: 10/783,823

Examiner asserts that element 42 in Pollard is a substrate, which is respectfully not conceded. However, it is apparent that the seal around element 72 depends on element 42 in Pollard. Therefore, Pollard does not disclose or suggest a hermetically sealed crystal unit sealed in a casing independent of the substrate, and for at least this additional reason, amended claim 1 is allowable. Additionally, the feature of canceled claim 9, now amended into claim 1, recites that the casing of the hermetically sealed crystal unit is not directly mounted on the substrate. Since the Examiner asserts that element 42 is a substrate, which is again respectfully not conceded, it is apparent that in Pollard, element 72 is mounted on element 42. Therefore, for at least this additional reason, amended claim 1 is allowable.

Claims 2 and 3 depend from claim 1, and therefore these claims are allowable for at least the same reasons as claim 1 is allowable.

Claims 4, 5, and 6 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Pollard in view of United States Patent No. 6,487,085 to Kimura et al. (hereinafter Kimura). Applicants respectfully traverse.

The addition of Kimura fails to cure the deficiency noted above with respect to claim 1, from which claims 4, 5, and 6 ultimately depend, and therefore these claims are allowable for at least the same reasons as claim 1 is allowable.

The Examiner further asserts that Kimura discloses the feature of an adjusting capacitor disposed outside of the cavity by element 32. However, element 32 of Kimura does not appear to be outside of a cavity, and therefore Kimura does not disclose or suggest the feature of claims 4 and 6.

Additionally, the Office Action asserts that the motivation to combine the references is "to allow for the chip elements and crystal to be recessed together" (Office Action at page 4,

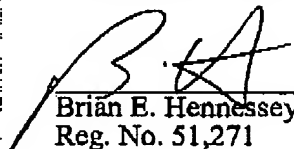
Serial No.: 10/783,823

lines 1-7). This motivation to combine does not appear to be supported by either reference. This motivation appears to be the result of improper hindsight reasoning. Applicants respectfully submit that the combination is improper, and therefore the rejection should be withdrawn.

CONCLUSION

In view of the remarks set forth above, this application is believed to be in condition for allowance which action is respectfully requested. However, if for any reason the Examiner should consider this application not to be in condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action. Any fee due with this paper may be charged to Deposit Account No. 50-1290.

Respectfully submitted,


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